Application No. 10/553,598 Amendment dated January 30, 2009 Reply to Office Action of August 1, 2009

AMENDMENTS TO THE CLAIMS

Docket No.: 80390(47762)

Claim 1 (Original): A method of producing a water-based pigment dispersion for ink-jet ink,

comprising:

a kneading process for kneading a mixture containing a styrene-based resin, a quinacridone-based pigment, a phthalimidomethylated quinacridone-based compound, an alkali

metal hydroxide and a humectant to produce a solid and colored kneaded mixture; and

a dispersing process for dispersing the solid and colored kneaded mixture in an aqueous

medium, wherein

the styrene-based resin has 60% by mass or more of a styrene-based monomer unit based on all monomer components, a monomer unit containing an unsaturated aliphatic carboxylic acid having a radical polymerizable double bond, an acid value of 50 to 300 and a

weight-average molecular weight of 7500 to 40000.

Claim 2 (Original): The method of producing a water-based pigment dispersion for ink-jet ink according to claim 1, wherein a quinacridonesulfonic acid-based compound is added in the

kneading or dispersing step.

Claim 3 (Original): The method of producing a water-based pigment dispersion for ink-jet ink according to claim 1, wherein the styrene-based resin has 60% by mass or more of a styrene-based monomer unit based on all monomer components, an acrylic acid monomer unit and a

methacrylic acid monomer unit.

Claim 4 (Currently amended): The method of producing a water-based pigment dispersion for ink-jet ink according to claim 1 or 2, wherein, in the kneading step, the content of the styrene-based resin is from 10 to 50% by mass based on 100 parts by mass of the total amount of the quinacridone-based pigment, the phthalimidomethylated quinacridone-based compound and the quinacridonesulfonic acid-based compound; the content of the humectant is from 40 to 80 parts by mass based on 100 parts by mass of the total amount of the quinacridone-based pigment, the phthalimidomethylated quinacridone-based compound and the quinacridonesulfonic acid-based compound[[,]]; and the solid content of the kneaded mixture containing the styrene-based resin,

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the quinacridone-based pigment, the phthalimidomethylated quinacridone-based compound and the quinacridonesulfonic acid-based compound during kneading is from 50 to 80% by mass.

Claim 5 (Original): The method of producing a water-based pigment dispersion for ink-jet ink according to claim 1 or 2, wherein the styrene-based resin has a glass transition point of 90°C or higher.

Claim 6 (Original): The method of producing a water-based pigment dispersion for ink-jet ink according to claim 1 or 2, wherein the amount of the alkali metal hydroxide is 0.8 to 1.2 times the amount required to neutralize all carboxyl groups of the styrene-based resin.

Claim 7 (Original): The method of producing a water-based pigment dispersion for ink-jet ink according to claim 1, wherein the phthalimidomethylated quinacridone-based compo und is a compound represented by the formula (I):

$$\begin{bmatrix} & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & &$$

 \cdots (I)

wherein R and R' each independently represents hydrogen, halogen, an alkyl group having 1 to 5 carbon atoms or an alkoxy group having 1 to 5 carbon atoms, m represents 0, 1 or 2, and n represents 1 to 4.

Claim 8 (Original): The method of producing a water-based pigment dispersion for ink-jet ink according to claim 1, wherein the quinacridone-based pigment is C.I. Pigment Red 122.

Claim 9 (Original): An ink composition for ink-jet recording comprising, as a main component, the water-based pigment dispersion for ink-jet ink produced by the method of any one of claims 1 to 3, 7 and 8.

Claim 10 (Original): The ink composition for ink-jet recording according to claim 9, which is used for a thermal jet type printer.

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Claim 11 (New): The method of producing a water-based pigment dispersion for ink-jet ink according to claim 7, wherein the compound represented by the formula (I) is a compound represented by the following formula (III):

wherein m and n each independently represents 0, 1 or 2, provided that m and n are not simultaneously 0.

Claim 12 (New): The method of producing a water-based pigment dispersion for ink-jet ink according to claim 1, wherein the phthalimidomethylated quinacridone-based compound is a compound represented by the formula (I):

$$\begin{bmatrix} & & & & & & & & & \\ & & & & & & & & \\ Rm & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & \\ & & \\ & & \\ & \\ & & \\ & \\ & & \\ & \\ & & \\ & \\ &$$

wherein R and R' each independently represents hydrogen, fluorine, chlorine, bromine, iodine, an alkyl group having 1 to 5 carbon atoms, m represents 0, 1 or 2, and n represents 1 to 4.